

REMARKS

This amendment is in response to the Non-Final Office Action dated September 19, 2008 (the “Office Action”). Claims 1-24 are pending in the application. Claim 1 has been amended. No new matter has been added.

Claims 1-6, 19, 20, and 22 are Allowable

The Office has rejected claims 1-6, 19, 20, and 22 under 35 U.S.C. §102(e), as being unpatentable over U.S. Patent No. 6,985,444 (“Rosen”). Applicants respectfully traverse the rejections.

The cited portions of Rosen do not disclose or suggest the specific combination of claim 1. For example, the cited portions of Rosen fail to disclose or suggest periodically selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values, as in claim 1.

In contrast to claim 1, the cited portions of Rosen describe testing and measuring line parameters and estimating line characteristics based on the measurements. Data rates supported by the line are then predicted based on the measured and estimated characteristics. The level of service supportable by the line is then determined and a service category is assigned to the line. *See* Rosen, column 12, line 15 to column 13, line 67. Thus, Rosen discloses the testing of existing telephony lines to determine the suitability of the line for providing DSL service to a subscriber. The testing measures the effect of fixed line characteristics such as insertion loss of the line, phase imbalance of the line, line length, and line gauge. Additional characteristics impacting the measurement include the presence of bridged taps, load coils and other path elements. *See* Rosen column 12, lines 21-28. The testing of these parameters is directed to the suitability of use of the line for DSL transmissions and to the predicted level of service or the data rate the line can support based on the measured characteristics. *See* Rosen, column 11, lines 64-66.

The cited portions of Rosen thus do not disclose periodically selecting a profile to be applied to the DSL line based on a comparison of first and second estimated data packet throughput values determined from the number of occurring code violations, as in claim 1. Rosen discloses determining the suitability of a line for a level of DSL service based on fixed line characteristics. While the Office posits in the Office Action that Rosen’s line characteristics equate to the code

violations in claim 1, Applicants respectfully disagree. In support of their position, Applicants refer to paragraph [0016] where code violations are discussed as a number of occurrences during a set time period, such as fifteen or thirty minutes. Thus, a code violation relates to the data stream carried on the line such as a data or packet error occurring within a time period. The line characteristics of Rosen, such as line length, are permanent or semi-permanent characteristics of the subject DSL line and relate to the ability of the line to carry the data or packet stream. The line characteristics of Rosen are thus not the equivalent of the code violations of claim 1. Further, Rosen determines a service category for a line based upon the line characteristics but does not disclose or teach comparing first and second estimated data packet throughput values determined from code violation occurrences to periodically select a profile to be applied to the DSL line.

Therefore, the cited portions of Rosen fail to disclose or suggest periodically selecting a profile to be applied to the DSL line based on a comparison of first and second estimated data packet throughput values determined from the number of occurring code violations, as in claim 1. Hence, claim 1 is allowable. Claims 2-6 are allowable, at least by virtue of their dependence from claim 1. Further, the dependent claims recite additional elements not disclosed or suggested by the cited portions of the above-cited references.

For example, the cited portions of Rosen fail to disclose or suggest determining a third estimated data packet throughput value associated with a third profile based on the number of code violations, as in claim 4. Rosen discloses determining the suitability of only a first data rate value based on the measured characteristics and does not disclose determining a third throughput value for comparison to other throughput values. For at least this additional reason, claim 4 is allowable.

The cited portions of Rosen do not disclose or suggest at least one element of claim 19. The cited portions of Rosen, as described above, disclose the testing of telephony lines to determine the suitability of a line for providing DSL service to a subscriber. The testing measures the effect of fixed line characteristics on the suitability of the line for DSL transmissions and the predicted level of service or data rate the line can support based on the measured fixed line characteristics. The cited portions of Rosen do not disclose or suggest periodically retrieving code violation measurements, determining an estimated data packet throughput value for each of dif-

ferent available profiles, and then selecting a profile for a DSL line based on the estimated throughput values. While Rosen discloses designating a profile for a DSL line based on automatic measured characteristics of the line, Rosen does not disclose or suggest periodically determining an estimated throughput of different profiles according to a code violation measurement and then selecting a profile based on one of the estimated throughput values as in claim 19.

Hence, claim 19 is allowable. Claims 20 and 22 are allowable, at least by virtue of their dependence from claim 19. Further, the dependent claims recite additional elements not disclosed or suggested by the cited portions Rosen.

For example, the cited portions of Rosen fail to disclose or suggest selecting each profile that has the highest estimated data packet throughput value. Rosen only discloses the selection of a profile based on the measured line characteristics, not on the estimated data packet throughput value. For this additional reason claim 20 is allowable.

Claims 9, 10, 14, 15, and 23-24 are Allowable

The Office has rejected claims 9, 10, 14, 15, 23 and 24, under 35 U.S.C. §103(a), as being unpatentable over Rosen in view of U.S. Published Application No. 2002/0021708 (“Ishiai”). Applicants respectfully traverse the rejections.

Claims 9 and 10 depend from claim 1. The cited portions of Rosen and Ishiai do not disclose or suggest the specific combination of claim 1. For example, the cited portions of Rosen fail to disclose or suggest periodically selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values, as in claim 1, which Applicants have shown to be allowable above. Instead, the cited portions of Rosen describe testing and measuring line parameters and estimating line characteristics based on the measurements. Data rates supported by the line are then predicted based on the measured and estimated characteristics. The level of service supportable by the line is then determined and a service category is assigned to the line. The cited portions of Rosen thus do not disclose a comparison of first and second estimated throughput values determined from a measured number of code violations.

Ishiai discloses, in Figure 7 and in paragraphs [0073] to [0075], the transfer to a remote display of a data rate of AV data. However, the cited portions of Ishiai fail to disclose or suggest those elements of claim 1 noted as lacking in Rosen. Specifically, the cited portions of Ishiai fail

to disclose or suggest periodically selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values determined from a measured number of code violations, as in claim 1.

Therefore, the cited portions of Rosen and Ishiai, individually or in combination, fail to disclose or suggest the specific combination of claims 9-10 and 14-15. Hence, claims 9-10 and 14-15 are allowable.

The cited portions of the Rosen and Ishiai references do not disclose or suggest the specific combination of claim 23. For example, the cited portions of Rosen fail to disclose or suggest a code violation measurement unit wherein the unit provides code violation data associated with each of the DSL lines. Instead, the cited portions of Rosen disclose the testing and determination of line characteristics such as line insertion loss, line phase imbalance, line length and line gauge.

Ishiai discloses in Figure 7 and in paragraphs [0073] to [0075] the transfer to a remote display of a data rate of AV data. However, the cited portions of Ishiai fail to disclose or suggest displaying a graphical report that includes first and second profile curves illustrating data packet throughput values with respect to code violation data, as in claim 23. Figure 7 illustrates the displaying of a data list, but does not display either a first or a second profile curve. Further, by admission of the Office on page 9 of the Office Action, the data rate is measured “based on the estimated characteristic of the line, and these characteristics are insertion loss of the line, phase imbalance of the line, the length of the line and the line gauge.” Applicants respectfully disagree. In support of their position, Applicants refer to paragraph [0016] where code violations are discussed as a number of occurrences during a set time period, such as fifteen or thirty minutes. Thus, a code violation relates to the data stream carried on the line such as a data or packet error occurring within a time period. The line characteristics of Ishiai, such as line length, are permanent or semi-permanent characteristics of the subject DSL line and relate to the ability of the line to carry the data or packet stream. The line characteristics of Ishiai are thus not the equivalent of the code violations of claim 1. Therefore, the cited portions of Rosen and Ishiai, individually or in combination, fail to disclose or suggest the specific combination of claim 23. Hence, claim 23 is allowable. Claims 24-25 are allowable, at least by virtue of their dependence from claim 23.

Claim 7 is Allowable

The Office has rejected claim 7 under 35 U.S.C. §103(a), as being unpatentable over Rosen in view of U.S. Published Application No. 2003/0189977 (“Sweitzer”). Applicants respectfully traverse the rejection.

Claim 7 depends from claim 1. The cited portions of Rosen and Sweitzer do not disclose or suggest the specific combination of claim 1. For example, the cited portions of Rosen fail to disclose or suggest periodically selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values, as in claim 1, which Applicants have shown to be allowable above. Instead, the cited portions of Rosen describe testing and measuring line parameters and estimating line characteristics based on the measurements. Data rates supported by the line are then predicted based on the measured and estimated characteristics. The level of service supportable by the line is then determined and a service category is assigned to the line. The cited portions of Rosen thus do not disclose a comparison of first and second estimated throughput values determined from a measured number of code violations.

The cited portions of Sweitzer disclose transmission speeds of 1536, 768 and 384 kbits per second. However, the cited portions of Sweitzer fail to disclose or suggest those elements of claim 1 noted as lacking in Rosen. Specifically, the cited portions of Sweitzer fail to disclose or suggest periodically selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values determined from a measured number of code violations, as in claim 1.

Therefore, the cited portions of Rosen and Sweitzer, individually or in combination, fail to disclose or suggest the specific combination of claim 7. Hence, claim 7 is allowable.

Claim 8 is Allowable

The Office has rejected claim 8 under 35 U.S.C. §103(a), as being unpatentable over Rosen in view of U.S. Patent No. 6,498,808 (“Tzannes”). Applicants respectfully traverse the rejection.

Claim 8 depends from claim 1. The cited portions of the Rosen and Tzannes references do not disclose or suggest the specific combination of claim 1. For example, the cited portions of Rosen fail to disclose or suggest periodically selecting a profile to be applied to the digital

subscriber line based on a comparison of first and second estimated data packet throughput values, as in claim 1, which Applicants have shown to be allowable above. Instead, the cited portions of Rosen describe testing and measuring line parameters and estimating line characteristics based on the measurements. Data rates supported by the line are then predicted based on the measured and estimated characteristics. The level of service supportable by the line is then determined and a service category is assigned to the line. The cited portions of Rosen thus do not disclose a comparison of first and second estimated throughput values determined from a measured number of code violations.

The cited portions of Tzannes disclose interleaved and non-interleaved profiles. However, the cited portions of Tzannes fail to disclose or suggest those elements of claim 1 noted as lacking in Rosen. Specifically, the cited portions of Tzannes fail to disclose or suggest periodically selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values determined from a measured number of code violations, as in claim 1.

Therefore, the cited portions of Rosen and Sweitzer, individually or in combination, fail to disclose or suggest the specific combination of claim 8. Hence, claim 8 is allowable.

Claims 11-13 are Allowable

The Office has rejected claims 11-13 under 35 U.S.C. §103(a), as being unpatentable over Rosen in view of U.S. Patent No. 6,678,245 (“Cooper”). Applicants respectfully traverse the rejections.

Claims 11-13 depends from claim 1. The cited portions of the Rosen and Cooper references do not disclose or suggest the specific combination of claim 1. For example, the cited portions of Rosen fail to disclose or suggest periodically selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values, as in claim 1, which Applicants have shown to be allowable above. Instead, the cited portions of Rosen describe testing and measuring line parameters and estimating line characteristics based on the measurements. Data rates supported by the line are then predicted based on the measured and estimated characteristics. The level of service supportable by the line is then determined and a service category is assigned to the line. The cited portions of Rosen thus do not

disclose a comparison of first and second estimated throughput values determined from a measured number of code violations.

The cited portions of Cooper disclose the sending of information from network elements to a performance management operations system at fifteen minute intervals wherein such data can include ‘cells lost’ data. However, the cited portions of Cooper fail to disclose or suggest those elements of claim 1 noted as lacking in Rosen. Specifically, the cited portions of Cooper fail to disclose or suggest periodically selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values determined from a measured number of code violations, as in claim 1.

Therefore, the cited portions of Rosen and Cooper, individually or in combination, fail to disclose or suggest the specific combination of claims 11-13. Hence, claims 11-13 are allowable.

Claims 16, 17 and 21 are Allowable

The Office has rejected claims 16, 17 and 21 under 35 U.S.C. §103(a), as being unpatentable over Rosen in view of U.S. Patent No. 7,218,645 (“Lotter”). Applicants respectfully traverse the rejections.

Claims 16 and 17 depend from claim 1. The cited portions of the Rosen and Lotter references do not disclose or suggest the specific combination of claim 1. For example, the cited portions of Rosen fail to disclose or suggest periodically selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values, as in claim 1, which Applicants have shown to be allowable above. Instead, the cited portions of Rosen describe testing and measuring line parameters and estimating line characteristics based on the measurements. Data rates supported by the line are then predicted based on the measured and estimated characteristics. The level of service supportable by the line is then determined and a service category is assigned to the line. The cited portions of Rosen thus do not disclose a comparison of first and second estimated throughput values determined from a measured number of code violations.

The cited portions of Lotter disclose a throughput comprised of TCP/IP data packets. However, the cited portions of Lotter fail to disclose or suggest those elements of claim 1 noted as lacking in Rosen. Specifically, the cited portions of Lotter fail to disclose or suggest periodi-

cally selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values determined from a measured number of code violations, as in claim 1.

Therefore, the cited portions of Rosen and Lotter, individually or in combination, fail to disclose or suggest the specific combination of claims 16-17. Hence, claims 16-17 are allowable.

Claim 21 depends from claim 19. The cited portions of the Rosen and Lotter references do not disclose or suggest the specific combination of claim 19. For example, the cited portions of Rosen fail to disclose or suggest periodically retrieving code violation measurements, determining an estimated data packet throughput value for each of different available profiles, and then selecting a profile for a DSL line based on the estimated throughput values, as in claim 19, which Applicants have shown to be allowable above. Instead, the cited portions of Rosen disclose the testing of telephony lines to determine the suitability of a line for providing DSL service to a subscriber. The testing measures the effect of fixed line characteristics on the suitability of the line for DSL transmissions and the predicted level of service or data rate the line can support based on the measured fixed line characteristics. The cited portions of Rosen thus do not disclose or suggest periodically determining an estimated throughput of different profiles according to a code violation measurement and then selecting a profile based on one of the estimated throughput values, as in claim 19.

The cited portions of Lotter disclose a throughput comprised of TCP/IP data packets. However, the cited portions of Lotter fail to disclose or suggest those elements of claim 19 noted as lacking in Rosen. Specifically, the cited portions of Lotter fail to disclose or suggest periodically determining an estimated throughput of different profiles according to a code violation measurement and then selecting a profile based on one of the estimated throughput values, as in claim 19.

Therefore, the cited portions of Rosen and Lotter, individually or in combination, fail to disclose or suggest the specific combination of claim 21. Hence, claim 21 is allowable.

Claim 18 is Allowable

The Office has rejected claim 18 under 35 U.S.C. §103(a), as being unpatentable over Rosen in view of U.S. Publication No. 2003/0033262 (“Aoki”). Applicants respectfully traverse the rejection.

Claim 18 depends from claim 1. The cited portions of the Rosen and Aoki references do not disclose or suggest the specific combination of claim 1. For example, the cited portions of Rosen fail to disclose or suggest periodically selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values, as in claim 1, which Applicants have shown to be allowable above. Instead, the cited portions of Rosen describe testing and measuring line parameters and estimating line characteristics based on the measurements. Data rates supported by the line are then predicted based on the measured and estimated characteristics. The level of service supportable by the line is then determined and a service category is assigned to the line. The cited portions of Rosen thus do not disclose a comparison of first and second estimated throughput values determined from a measured number of code violations.

The cited portions of Aoki disclose switching a subscriber to/from a high-speed line. However, the cited portions of Aoki fail to disclose or suggest those elements of claim 1 noted as lacking in Rosen. Specifically, the cited portions of Aoki fail to disclose or suggest periodically selecting a profile to be applied to the digital subscriber line based on a comparison of first and second estimated data packet throughput values determined from a measured number of code violations, as in claim 1.

Therefore, the cited portions of Rosen and Aoki, individually or in combination, fail to disclose or suggest the specific combination of claim 18. Hence, claim 18 is allowable.

CONCLUSION

Applicants have pointed out specific features of the claims not disclosed, suggested, or rendered obvious by the cited portions of the references as applied in the Office Action. Accordingly, Applicants respectfully request reconsideration and withdrawal of each of the objections and rejections, as well as an indication of the allowability of each of the pending claims.

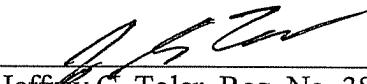
Any changes to the claims in this response, which have not been specifically noted to overcome a rejection based upon the cited art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

The Examiner is invited to contact the undersigned attorney at the telephone number listed below if such a call would in any way facilitate allowance of this application.

The Commissioner is hereby authorized to charge any fees, which may be required, or credit any overpayment, to Deposit Account Number 50-2469.

Respectfully submitted,

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Date


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